Contactless Transit Project

Contactless transit payments offer:

- **Fast** and **easy** payment for passengers, eliminating the need to queue for a paper ticket or to 'top-up' smart tickets. A recent [Transport Focus Customer Survey](#) found that of customers using contactless payments for general retail, 84% cited speed and 79% cited ease as reasons for use.

- **Secure** and **transparent** payments, which can be seen on the customer's bank statement or app.

- **Operational cost savings** for the transport operator.

UK Cards has created an **impartial forum** to establish the UK-wide approach to contactless ticketing. Working with government, rail and bus operators and card issuers, acquirers and schemes, together we have developed a Contactless Transit Framework and resolve issues that can only be managed at a cross-industry level.

The Framework allows transit operators to consider whether to implement contactless as a ticketing option, and will deliver a **consistent customer experience** and **interoperability** across regions and transport modes.

The Framework has been a significant enabler for the development of contactless transit outside London:

- It is being used as the basis for all transit operator and regional business cases, and several bus and rail operators are developing their own contactless ticketing solutions and pilots

- The big 5 bus companies have committed to making all buses contactless by 2022

- The rail industry has indicated it will support contactless as part of its commitment to remove paper tickets by 2025

- International interest has been generated

From 2015 to mid-2016 the collaborative project has developed three models that support the vast majority of different transit journey types. UK Cards is continuing **work until mid-2017** on the Contactless Transit Framework, with funding from the partners below.

The case for Contactless Transit

There is wide-scale interest in contactless transit as a ticketing option for the following reasons:

- The **cost of paper tickets** and other 'smart' ticket solutions represents a large portion of the cost of sale (estimated at 15%), while the **handling of cash** remains expensive and problematic. By contrast, contactless transit is **relatively low cost to operate** after the initial infrastructure outlay

- The **majority of people** have at least one contactless card and contactless payments are growing in popularity

1 out of 4 card payments is contactless

Over 100 million cards are now contactless

- Contactless transit is **perceived very positively by customers** – the Transport Focus research shows 61% of people think contactless is suitable for paying for train, bus and tram fares, and 43% say they would be likely to use contactless on public transport if it was introduced tomorrow

- Contactless transit is an open system that **supports most journey use cases** and **does not require a customer to register**

- Contactless transit is **based on globally recognised standards** and a **trusted security framework**

- Contactless transit is the most likely solution to be able to **interoperate with TfL**, where 70% of journeys begin, take place or end

- Contactless transit can offer transit operators **customer data** by which to drive operational and route optimisation

- Customers can use their mobile for PAYG travel, which uses the same EMV standards as cards (and now accounts for 7.5% of all Contactless EMV transactions on TfL)

In addition, the **success of contactless payments on the Transport for London network** has been impressive:

Almost 40% of TfL PAYG journeys take place on contactless

Around 17m unique contactless cards used (issued in 98 different countries)

Over 650k contactless cards seen on a typical day

Contactless Transit Models

1. SINGLE PAY AS YOU GO MODEL	2. AGGREGATED PAY AS YOU GO MODEL	3. PRE-PURCHASE MODEL
• Replaces cash • Fare charged at start of each journey	• Replaces cash • Can combine several journeys into one charge • Charge typically collected at end of each day • Fare capping possible	• Replaces paper tickets • Fare charged at point of purchase • Card permits travel • Can include season tickets
Suited to low to medium value single operator services (e.g. bus)	Suited to low to medium value multi-operator, multi-mode services (e.g. city centre travel)	Suited to higher value services (e.g. long distance travel)

1. Customer uses their contactless card or device to make a single journey. Touch in only.
2. Customer can view charge on their bank statement.

1. Customer makes a multi-leg journey or multiple journeys using their contactless card or device. Touch in and touch out.
2. End of day processing settles customer's daily charge.
3. Customer can view charge on their bank statement.

1. Customer purchases their ticket online and associates it with their contactless card or device.
2. Customer can view their journey on their bank statement.
3. Customer uses their contactless card as their ticket to travel.